# Commonwealth of Kentucky Division for Air Quality

# PERMIT STATEMENT OF BASIS

TITLE V DRAFT PERMIT NO. V-07-006
ROGERS GROUP, INC – HOPKINSVILLE ASPHALT
NASHVILLE, TENNESSEE 37202
FEBRUARY 21, 2007
ROBERT L. WILLIAMS, REVIEWER
PLANT I.D. # 21-047-00060
AI # 789

#### **SOURCE DESCRIPTION:**

Rogers Group, Inc – Hopkinsville Asphalt is currently operating a batch hot-mix asphalt plant with an associated RAP unit at their Hopkinsville Asphalt Plant facility in Hopkinsville, Kentucky and governed by Title V permit #V-99-004.

The source is currently operating under:

**Permit V-99-004**, signed July 30, 1999, which covers their batch hot mix asphalt plant and the haul road and yard area;

## **COMMENTS:**

## TYPE OF CONTROL AND EFFICIENCY

The particulate emissions from the rotary dryer are controlled by a baghouse (control efficiency of 99.8%).

The particulate emissions from the loadouts, stockpiles, receiving hopper, crusher, and conveyors associated with the RAP unit, and the aggregate handling and stockpile associated with the asphalt plant are controlled by a wet suppression method (control efficiency of 90%).

The emissions from haul roads (paved and unpaved) are controlled by a wet suppression method. The paved haul road has a control efficiency of 90%, while the unpaved haul road has a control efficiency of 70%.

The CO, NO<sub>x</sub>, and SO<sub>2</sub> have no controls assigned to them.

## **EMISSION FACTORS AND THEIR SOURCE**

AP-42, Chapter 11.1, Hot Mix Asphalt Plants, was used for the asphalt processing.

Emission Factors for the RAP Unit are the standard factors used for the limestone industry in the Commonwealth of Kentucky by the Division for Air Quality's Minerals Section.

**COMMENTS: (CONTINUED)** 

# APPLICABLE REGULATIONS

The Rotary Dryer associated with the asphalt plant are governed by **401 KAR 60:005**, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I) and **401 KAR 44:010**, Standards for the management of used oil, which incorporates by reference 40 CFR 279, Subpart B).

The aggregate handling, stockpiles, and haul roads and yard areas associated with the asphalt plants, along with the loadouts, stockpile, and receiving hopper associated with the RAP Unit are governed by **401 KAR 63:010**, Fugitive emissions.

The RAP Crusher and RAP Conveyors and Transfer Points are governed by **401 KAR 60:670**, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 3 of 401 KAR 60:670).

#### **PROPOSALS:**

Hopkinsville Stone Company (WOS Dixie Pavers) applied for a permit to construct a batch hot mix asphalt plant on July 1, 1985 due to relocating their existing plant located at its US Highway 41 N location to its new location at Highway 41A. There was also a corresponding increase in the plant's maximum production rate from 250 tons/hour to 350 tons/hour. A permit (Permit No. S-85-159, ID # 072-0700-0060) was issued on August 9, 1985. An operating permit (Permit No. S-85-168) was issued for this facility on January 14, 1986. Rogers Group, Inc – Hopkinsville Asphalt Plant submitted an application in July 1998 for the addition of a RAP unit to their existing facility. Permit S-98-072 was issued to Rogers Group, Inc on August 31, 1998 for the construction and operation of this modification. A Title V permit (Permit V-99-004, July 30, 1999) was issued to this facility when Rogers Group, Inc requested an increase in their asphalt production from 360,000 tons per year to 525,000 tons per year and is the current operating permit from the facility.

Rogers Group, Inc – Hopkinsville Asphalt submitted an application on July 26, 2002 for a modification to the Title V permit issued to their Hopkinsville Asphalt Plant. They requested that the Title V permit be modified to represent a Synthetic Minor source versus the Title V source. The Title V permit, V-99-004, was to expire on July 30, 2004, and Rogers Group, Inc – Hopkinsville Asphalt was requesting that the Title V permit be allowed to expire and a Synthetic Minor permit be issued to the facility. The application was resubmitted on May 14, 2004.

After being informed that the asphalt production of the batch-mix plant would be restricted to 475,000 tons per year, Rogers Group, Inc – Hopkinsville Asphalt informed the Division via telephone on February 20, 2007 that they would prefer to remain under Title V status due to the possibility of exceeding the production limit set forth under a Conditional Major permit. Therefore, the new permit for this facility will be a renewal of the existing Title V permit and will reflect any changes in regulations and permitting procedures that have occurred since the issuance of their current Title V permit. The new Title V permit will also authorize the use of natural gas and waste oil as a source of fuel for the rotary dryer, as well as the No. 2 Fuel Oil listed in the submitted application. If Rogers Group, Inc – Hopkinsville Asphalt chooses to utilize used oil as a fuel source for the rotary dryer, State Regulation 401 KAR 44:010, Standards for the management of used oil, which incorporates by reference 40 CFR 279, Subpart B, will apply.

#### **PROPOSALS:**

The existing batch-mix plant is regulated under State Regulation 401 KAR 61:020, Existing process operations, and 401 KAR 63:010, Fugitive emissions. Since the Rogers Group, Inc – Hopkinsville Asphalt plant had relocated their facility in 1985 State Regulation 401 KAR 60:005, Standards of performance for new stationary sources, which incorporates by reference 40 CFR 60.90 (40 CFR 60, Subpart I) would apply. The renewal permit will also include the RAP unit which had been omitted on their current operating permit.

## **EMISSION AND OPERATING CAPS DESCRIPTION:**

The source is major (>100 tons / year) with respect to particulate matter, CO, NOx, and SO2 emissions. The Title V Permit, V-99-004, requires: Waste oil shall not be used as a fuel for the rotary dryer or the asphalt heater unless it has been recycled and meets or exceeds the following specifications:

- a. No more than five (5) ppm of arsenic,
- b. No more than two (2) ppm of cadmium,
- c. No more than ten (10) ppm of chromium,
- d. No more than 100 ppm of lead,
- e. No more than 1000 ppm of total halogens, and
- f. Minimum flash point of 100 degrees F.

## **CREDIBLE EVIDENCE:**

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.